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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,393	04/10/2001	Michael E. McHenry	608-281	8969

4249 7590 12/15/2004

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EXAMINER

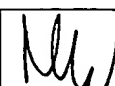
ROSEN, NICHOLAS D

ART UNIT PAPER NUMBER

3625

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/829,393	<b>Applicant(s)</b> MCHENRY ET AL.	
	<b>Examiner</b> Nicholas D. Rosen	<b>Art Unit</b> 3625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1-32 have been examined.

#### ***Claim Objections***

Claims 21 and 22 are objected to because of the following informalities: In the second line of claim 21, "at lest one" should be "at least one". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-22**

Claims 1, 2, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the anonymous article, "Telco, LML, Apollo Tyres Tie up with Castrol," hereinafter "Telco," in view of Osborn et al. (U.S. Patent 6,182,048). As per claim 1, "Telco" discloses (c) providing a motor oil having recommended, or user desired enhancements (first paragraph) based on (a) data including type information about the motor vehicle in which the engine oil is to be utilized sufficient to identify a user's requirements (first paragraph). "Telco" does not disclose analyzing the data by computer, but Osborne teaches analyzing motor vehicle related information by computer (column 3, line 27, through column 6, line 35). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to analyze the data by computer, and provide an engine oil responsive to the data analysis, for the obvious advantage of using a computer for calculations that may be difficult or time-consuming for human beings to perform, e.g., involving multivariate linear regression, as taught in Osborn, to provide a motor oil selected on the basis of numerous factors.

As per claim 2, "Telco" discloses basing a decision on type of vehicle, and selecting a lubricant as recommended based on the type of vehicle (first paragraph).

As per claim 3, Osborn teaches computer analysis based on expected ambient temperatures (column 5, line 61, through column 6, line 35). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to practice (a) to input at least one of expected ambient temperatures, average driving distance, normal type of driving, and interest in fuel

economy, cold weather starting, and engine longevity, for the obvious advantage of providing an engine oil suited to a particular user's needs.

As per claim 4, "Telco" discloses making available a customized engine oil (first paragraph).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Telco" and Osborn as applied to claim 4 above, and further in view of official notice. "Telco" does not disclose that (a) is practiced by displaying a questionnaire on a computer screen connected to a wide area computer network, and prompting a user to input information into the questionnaire. However, official notice is taken that it is well known to obtain data by displaying a questionnaire on a computer screen connected to a wide area computer network (e.g., the Internet), and prompting a user to input information into the questionnaire. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to do this, for the obvious advantage of conveniently obtaining desired data from a user who may be remote from the computer analyzing the data.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Telco" and Osborn as applied to claim 4 above, and further in view of official notice. As per claim 6, "Telco" does not disclose that (a) is practiced by displaying a questionnaire on a computer screen connected to a wide area computer network, and prompting a user to input information into the questionnaire. However, official notice is taken that it is well known to obtain data by displaying a questionnaire on a computer screen connected to a global computer network (i.e., the Internet), and prompting a user to

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input information into the questionnaire. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to do this, for the obvious advantage of conveniently obtaining desired data from a user who may be remote from the computer analyzing the data.

As per claim 7, "Telco" does not disclose displaying on the computer screen indicia indicating the ability of the user to order other automotive products, but official notice is taken that it is well known to display advertising indicia on computer screens. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to display displaying on the computer screen indicia indicating the ability of the user to order other automotive products, for the obvious advantage of profiting from the sale of automotive products to persons likely to be interested in buying them.

Claims 8-12, 14, 15, 16, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Telco" and Osborn as applied to claim 4 above, and further in view of Denis et al. (U.S. Patent 4,954,273). As per claims 8-12, "Telco" is not explicit about the composition of the lubes, but Denis teaches a customized motor oil containing about 86.24 percent of a baseline motor oil, and at least one of a fuel economy additive, an antiwear additive, a detergent additive, a dispersant additive, a corrosion inhibitor, an antioxidant, a pour point depressant, or a blend stability additive (Fully Formed Example III, column 13, lines 46-68). Hence, it would have been obvious to one of ordinary skill in the art of engine lubrication at the time of applicant's invention to practice (c) to provide a baseline motor oil of from about 50, 60, 75, or 80 percent to 99.9 percent of

the final customized engine oil, and at least one of the listed additives, for the obvious advantages of producing increased fuel economy, reduced wear, etc.

As per claim 14, Denis teaches providing an absolute increase of from about 0.1-10% in at least one selected from the group consisting of fuel economy additives, antiwear additives, detergent additives, dispersant additives, oxidation control additives, corrosion inhibitors, pour point depressants, and blend stability additives (Fully Formed Example III, column 13, lines 46-68). Hence, it would have been obvious to one of ordinary skill in the art of engine lubrication at the time of applicant's invention to practice (c) to add additives as listed, for the obvious advantages of producing increased fuel economy, reduced wear, etc.

As per claim 15, Denis teaches providing additives leading to at least two or more enhanced features selected from enhanced wear protection, enhanced fuel economy, enhanced detergency, enhanced dispersancy, enhanced low temperature startability, enhanced high temperature viscosity, extended drain capability, enhanced wear protection, corrosion protection, enhanced control of oxidation and enhanced blend stability (Fully Formed Example III, column 13, lines 46-68). Hence, it would have been obvious to one of ordinary skill in the art of engine lubrication at the time of applicant's invention to practice (c) to add additives leading to at least two or more of the listed enhanced features, for the obvious advantages of producing increased fuel economy, reduced wear, etc.

As per claim 16, likewise, Denis teaches adding additives leading to at least three of said enhanced features, making claim 16 obvious on the same grounds as claim 15.

As per claim 21, Denis does not expressly disclose that (c) is practiced to change at least one of detergent and dispersant concentration levels over the range from about -50% to about +200% compared to their concentration levels in a quality baseline motor oil, but does teach that "a basic nitrogen containing dispersant" can vary from 1 to 15 weight percent, and "a detergent in the form of an overbased calcium sulfonate" from 0.2 to 3 weight percent (General Formulated Example, column 13, lines 1-21). Hence, it would have been obvious to one of ordinary skill in the art of engine lubrication at the time of applicant's invention to practice (c) to change at least one of detergent and dispersant concentration levels over the range from about -50% to about +200% compared to their concentration levels in a quality baseline motor oil, for the obvious advantage of producing a customized engine oil having desired properties.

As per claim 22, Denis discloses variations in both detergent and dispersant levels, as noted above in regard to claim 21.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Telco," Osborn, and Denis as applied to claims 8-12 above, and further in view of official notice. Neither "Telco" nor Denis discloses that (c) is practiced to provide about 0.1-100% percent improvement in at least one of fuel economy, wear performance, detergent performance, dispersant performance, oxidation protection, corrosion protection, low temperature performance and blend stability, but Denis does teach adding additives to



improve these characteristics, as set forth above. The reasonable presumption is that one would not go to the trouble of attempting to determine optimal quantities of various additives, and the expense of adding these additives, as taught in Denis and other art of record, unless these additives produced a non-trivial improvement in the properties that they were intended to improve. Indeed, one would hardly identify a chemical as, for example, an antiwear additive unless its effects on preventing wear were detectable without extreme effort, implying an improvement greater than 0.1%. Official notice is taken that the effects of many additives are, within a range, dependent on concentration, so that, even if the improvement were over 100% under some circumstances, a lower concentration would produce an improvement of less than 100% -- and, indeed, it might be that no concentration of an additive would improve performance by more than 100% over a baseline oil. Hence, it would have been obvious to one of ordinary skill in the art of engine lubrication at the time of applicant's invention to practice to practice (c) to provide about 0.1-100% improvement in at least one of the listed characteristics, as an obvious consequence of adding desirable additives as taught by Denis.

Claims 17, 18, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Telco," Osborn, and Denis as applied to claims 15 and 16 above (to claim 15 in the case of claims 17 and 19; to claim 16 in the case of claims 18 and 20), and further in view of official notice. These claims are essentially parallel to claim 13, and rejected on essentially the same grounds.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Telco," Osborn, and Denis as applied to claims 8-12 above, and further in view of official notice.

**Claims 23-32**

Claims 23, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomew et al. (U.S. Patent Application Publication 2001/0047309) in view of the anonymous article, "Telco, LML, Apollo Tyres Tie up with Castrol," hereinafter "Telco," and Osborn et al. (U.S. Patent 6,182,048). As per claim 23, Bartholomew discloses a method of obtaining a custom lubricant (paragraph 70) by (a) using an implement to transmit user information to a customized blending facility (paragraph 10); (b) blending a custom liquid using the information (paragraphs 7, 9, and 30); and (c) delivering to, installing, or making available for pickup available for pickup by the user the custom liquid (paragraphs 10 and 33). Bartholomew discloses that the custom liquid can be a lubricant (paragraph 70), but does not disclose that the user information is information about a user's motor vehicle type, environment of use, and desired operational characteristics, but "Telco" teaches the choice of an engine oil/lubricant depending on the user's vehicle's specific lubrication needs, in particular, motor vehicle type, to optimize desired operational characteristics (first paragraph). Osborn teaches taking into account a vehicle's environment of use (column 3, line 62, through column 4, line 27). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to have the information be information about a user's motor vehicle type, environment of use, and

desired operational characteristics, for the obvious advantage of making the engine oil optimal for the particular circumstances in which it was to be used.

As per claim 24, Bartholomew discloses use of a computer network (Abstract).

As per claim 25, Bartholomew discloses use of the Internet, a global computer network (Abstract; paragraphs 30, 33, and 34).

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomew, "Telco," and Osborn, and as applied to claim 25 above, and further in view of official notice. Bartholomew does not expressly disclose that (a) is practiced by electronically displaying a questionnaire on a computer screen connected to a global computer network, and prompting a user a user to input information into the questionnaire (although Bartholomew comes close, in paragraphs 30-33), but official notice is taken that it is well known to obtain data by displaying a questionnaire on a computer screen connected to a global computer network (i.e., the Internet), and prompting a user to input information into the questionnaire. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to do this, for the obvious advantage of conveniently obtaining desired data from a remote user.

Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomew, "Telco," and Osborn, and as applied to claim 23 above, and further in view of Denis et al. (U.S. Patent 4,954,273). As per claim 27, Bartholomew does not disclose that blending a custom engine oil is practiced to add additives leading to at least two or more enhanced features selected from enhanced wear protection,

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enhanced fuel economy, enhanced detergency, enhanced dispersancy, enhanced low temperature startability, enhanced high temperature viscosity, extended drain capability, enhanced wear protection, corrosion protection, enhanced control of oxidation and enhanced blend stability, but Denis teaches adding additives to enhance two or more of these features (Fully Formed Example III, column 13, lines 46-68). Hence, it would have been obvious to one of ordinary skill in the art of engine lubrication at the time of applicant's invention to practice (b) to add additives leading to at least two or more of the listed enhanced features, for the obvious advantages of producing increased fuel economy, reduced wear, etc.

As per claim 28, likewise, Denis teaches adding additives to enhance three or more of the listed features (Fully Formed Example III, column 13, lines 46-68), making claim 28 obvious on the same grounds as claim 27.

As per claims 29-32, Denis teaches a customized motor oil containing about 86.24 percent of a baseline motor oil, and at least one of a fuel economy additive, an antiwear additive, a detergent additive, a dispersant additive, a corrosion inhibitor, an antioxidant, a pour point depressant, or a blend stability additive (Fully Formed Example III, column 13, lines 46-68). Hence, it would have been obvious to one of ordinary skill in the art of engine lubrication at the time of applicant's invention to practice (c) to provide a baseline motor oil of from about 50, 60, 75, or 80 percent to 99.9 percent of the final customized engine oil, and at least one of the listed additives, for the obvious advantages of producing increased fuel economy, reduced wear, etc.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kennedy (U.S. Patent 4,764,296) discloses a railway lubricating oil. Adams et al. (U.S. Patent 5,531,911) disclose a metal free hydraulic fluid with amine salt. Roby et al. (U.S. Patent 5,726,132) disclose an oil composition for improving fuel economy in internal combustion engines. Yamaguchi (U.S. Patent 6,001,779) discloses a lubricating oil composition having an ashless wear inhibitor.

Birkland ("New PM Programs") discloses synthetic engine oils. Conte et al., ("Macromolecules for Inhibition of Corrosion and Wear," Abstract) discloses corrosion inhibitors as additives for greases. The anonymous article, "And Now, Designer Motor Oil?" (Abstract only), discloses a new oil especially for sport utility vehicles. The anonymous article "Carcare . . ." discloses the use of engine additives.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas D. Rosen, whose telephone number is 703-305-0753. The examiner can normally be reached on 8:30 AM - 5:00 PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins, can be reached on 703-308-1344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Non-official/draft communications can be faxed to the examiner at 703-746-5574.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Nicholas D. Rosen*

**NICHOLAS D. ROSEN  
PRIMARY EXAMINER**

December 13, 2004